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# CONSTRUCTING THE INDICATORS OF QUALITY MANAGEMENT FOR RADIO PROGRAMS

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***ABSTRACT:***

***Radio broadcasting serves the world with programmed information and music, which is one of the most widespread electronic mass media. However, it is facing the drastic competition due to market change and environmental evolution. Managing program quality becomes a critical survival issue for a radio station to develop its competitive advantages. Quality management of the radio programs to retain their quality is entangled with several complicated complex factors. In order to identify the primary factors in a systematic way as well as materialize them for practical use, this study adopted modified Delphi method, which was based on total quality management theory (TQM) to develop the questionnaire.***

***In order to identify the critical factors which influence radio program quality, the researcher has organized the critical issues from literature. Six categories of quality issues were analyzed from the concepts mentioned by the media management scholars, including practitioners, process, products, interactive communication, standard evaluation, and continuous improvement. Furthermore, according to the outcomes of modified Delphi method, the factors could be integrated into four dimensions: operation, coordination, structure and improvement.***

***The coordination dimension alone was further split into four sub-dimensions, while the other three included two sub-dimensions each. Each sub-dimension encompassed six to 19 specific and operational indicators that measured the quality of the radio program. In total, there were 72 indicators.***

***KEYWORDS : Radio Program, Quality Management, Indicator, Modified Delphi***

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## INTRODUCTION

Radio broadcasting is available worldwide and is a mass media that can be easily accessed. Radio broadcasting operates throughout the world imparting programmed information and music (Hoeg & Lauterbach, 2004). Nowadays, as a result of technological, economical, regulatory, global and social modifications, the incumbent radio stations are encountering extreme competition that challenges their existence (Albarran, 2013). As a measure to manage this traditional media industry and survive among the competition, managers of radio stations engage in rational and progressive methods. Pursuing and developing valid plans is more dependable in the long term for good quality of radio programs rather than succeeding as an overnight sensation (Leblebici, Salancik, Copay, & King, 1991; Keith, 1987). To maintain radio program quality, managers should never disregard any influential factor that they might come across for radio program quality should not be ignored by the managers.

Radio broadcasting engages the services of numerous program providers, transmitters, and receivers (Herrick, 2012).Managers need to consider and employ numerous factors to successfully manage the quality of radio programs. Implementation of these factors and their manifestation is a complicated process. This process involves several critical tasks from development, production, distribution to exhibition. It is imperative that the radio manager scrutinize each task to ensure its performance (Albarran, 2013).

In media management, total quality management (TQM) is one of the existing, well-applied approaches for product production and custom service. This approach endeavors to merge various strategies to dole out the best products and services by constantly improving each feature of an operation (Albarran, 2013). Unlike the quality of general goods, it is challenging to measure service quality in precise manufacturing specifications. Service quality has been shown to be highly dependent on the functioning of practitioners, organizational resource, and the collaboration between administrators and employees (Herrick, 2012; Zeithaml, Berry, & Parasuraman, 1988). In the radio industry, the quality of radio programs is determined at the individual level as well as the organizational level. Radio managers can embrace various approaches based on TQM that will help promote and demand high quality in the products and processes.

Several factors are engaged in the production process of a radio program. Each factor has its own significance depending on its market, position, programming, etc. and, therefore, can differently influence a radio station. This study intends to develop a framework that systematically integrates the factors that regulate radio program quality. In addition, all the factors are specifically presented for practical operation. The following are the objectives of this study:

- Asserting the critical issues from literature that influence radio program quality.
- Organizing the quality management factors into a systematic framework.
- Turning the quality management factors into specific operational indicators.

## LITERATURE REIVEW

According to the modern approaches of management thoughts, varied management scope became apparent since the 1960s. The management theorists shifted their focus from class and human relations schools to new issues, such as management effectiveness, system approaches and leadership (Albarran, 2013). Among these approaches, total quality management (TQM) theory is extensively implemented in the media industry for service quality control. Many areas of TQM has applied in electronic media, from actual production of media content and advertising to the use of mission statements and public relations activities.

Defining quality is challenging because of its multiple dimensions. In addition, quality cannot be associated only with objects and goods, but is also involved in tangible/intangible performance and service. According to International Standard Organization, quality is considered to be the competence that satisfies specific needs by its features or characteristics from goods or service. The definition of quality can be characterized by five approaches (Garvin, 1984):

- The transcendent approach of philosophy;
- The product-based approach of economics;
- The user-based approach of economics, marketing, and operations management;
- The manufacturing-based approach;

- The value-based approaches of operations management.

These approaches expose the four main areas that need to be addressed for quality issues. Philosophy lays emphasis on its definitional issues, where as economics engages in profit maximization and market dynamics. Marketing highlights the causes of purchase behavior and customer satisfaction, whereas operations management concentrates on practical operation and manufacturing control. On the basis of terminology, various perspectives of quality management are brought about by these approaches.

TQM is well applied to several disciplines, including business, engineering, healthcare, education, and administration (Dean, & Bowen, 1994). Several scholars have deliberated on its significance. Crosby (1979) aimed at restraining cost through quality improvement and emphasized that high quality is observed in both high- and low-end products. Deming (1986) stressed on the systemic nature of organizations, the value of leadership, and the need to decrease variation in organizational processes. Juran's (1989) framework specified the following three sets of quality-related activities: planning, control, and improvement, which also called to attention the usage of statistical tools to exclude defects. Sallis (1993) deemed it as a philosophy that contributes to continuous improvement. TQM also included several practical tools that helped to satisfy and surpass requirements and expectation from present and future customers.

According to the aforementioned definitions or explanations, TQM is associated with all stake holders. Each individual is accountable for quality. Commencing from input to outcome, apt strategies and methods are required to meet specific standards or customers' needs. Adopting quality control procedures and strategies does not only aim at reversing the negative image associated with poor-quality products, but also encourage and demand high quality in the products and services.

Essentially, total quality management is linked with practitioners, process, and product. These three aspects are also involved in program quality in the media industry. The control process of program production needs to be ascertained and cultivated. Radio practitioners are presumed to be well trained in program production skills as well as they need to develop suitable mindsets for excellence. The programs are outcomes of a radio station, and these outcomes have to be relevant to the audience's requirements or interests.

## METHODS AND PROCEDURES

### Methods

In this study, data were collected by the modified Delphi method. Delphi method was initially developed by Rand Company, USA, in 1950. This method employs group decision-making to gather data wherein an expert group is structurally communicated, such that the specialists involved can participate and express their voices, and reach final agreements without face-to-face interaction (Wang, Gao & Guo, 2012). This method is directed at diverse fields of social science, such as management, industrial design, education, politics, and marketing (Keeney, Hasson, & McKenna, 2006; Uhl, 1990). The qualitative nature of the method acknowledges varying perspectives of experts for comparing, exchanging, and integrating. This methodology is presumed to help arrive at some consensus for complicated issues (Wang, Gao & Guo, 2012; Skulmoski, Hartman, & Krahn, 2007). Although no big-scale sample is investigated in the process, this method produces effective decisions or solutions. The efficiency of the method is dependent on the repetitive series of expert discussions, wherein the experts interact and exchange their experiences, insights, and judgements (Hsu & Sandford, 2007).

Delphi method has some advantages, such as free input from experts, free dialogues without time–space limits, and no complicated calculation; however, it has the following shortcomings, which also need to be noticed: time consuming, difficulty in maintaining control, and presenting contradictions with time. In 1995, Murry and Hammons developed a modified Delphi method. This method used open-structure questionnaires to generate conversations among experts. This new approach developed its questionnaire by organizing its relevant literature in the very beginning of the study. This difference not only helps to save time, but also helps experts to focus their attention solely on the issues (Scarcella, Stewart, & Custer, 1999, Delbecq, Van de Ven & Gustafson, 1975).

Several factors influence the quality of radio program. This study endeavors to delve into some of these factors. The production process involves numerous of these factors. The stakeholders, such as radio administrators, program specialists, audiences, and the other participants, are capable of influencing the quality of radio products. However, such valid factors need to be identified. This study enlists the services of experts to analyze and manage the internal and external environments of a radio station. The experts collaborate to recognize all critical factors as indicators. To attain the research objectives on time, this study implemented the modified Delphi method. The questionnaire was fashioned on the basis of total quality management theory. The selected experts started discussions with the concepts or ideas analyzed from literature, which made the discussion process more specific and effective.

**Procedures**

Initially, the modified Delphi method generated a questionnaire assisted by literature, and, then, it was communicated to the experts involved. There were no personal interactions for discussion. Nevertheless, the experts provided their opinions and insights, and at the end of each round, the researchers collected the responses, reorganized it, and circulated it again among them for further consultations. This process continued until consensus in opinions was reached (Scarcella, Stewart, & Custer, 1999; Delbecq, Van de Ven, & Gustafson, 1975).

There are 5 steps for implementing modified Delphi method, including verifying research questions and methods, recruiting appropriate participants, developing the questionnaire based on literature, starting recurring survey among experts, and forming consensus among the participants. (Skulmoski, Hartman, & Krahn, 2007). This study followed these steps to collect data, in which 7 experts, who were media scholars and radio practitioners, were recruited for expert discussion. The expert discussion took place two times to reach agreement.

## RESULTS

**Critical Quality Issues from Literature**

According to those management scholars, there were many primary concepts mentioned related to total quality management. For example, Sallis (1993) focused on continuous process of improvement, while Juran and Gryna (1993) emphasized the philosophy of total involvement and continuous improvement, rather than cost reduction. Deming (1986) claimed that importance of leaders' commitments as well as production process control. In order to put these concepts into the practice, these scholars developed various principles or guidelines, such as Deming's 14 points, Cosby's 14 points, and Ishikawa's 10 principles.

To sum up, the researcher organized three features of TQM. First, it is a management process of continuous improvement in all aspects; Second, all the units or employees associated with the process accept responsibility; and third, its ultimate objective is not only quality maintenance and management, but also enhancing service to meet the customers'

requirements. The term "total" denotes that all units or employees included should be responsible. The term "quality" is concerned with the processes and production that have to meet the anticipated standards and customers' requirements. The term "management" signifies the efficient methods and means to attain the targets.

TQM functions as an umbrella that encourages all stakeholders involved to take responsibility for continuous contribution to quality maintenance and management. This collaborative process can help achieving organizational sustainability. Intrinsic to this approach, three Ps can be uncovered: practitioners, process, and products. These three elements form the basic framework for quality control of organizations. They just echoed the TQM's essences.

In the media industry, TQM has been practically elaborated. Kwan (1999) adopted the system approach to examine the production process of broadcasting programs. He claimed that broadcasting programs have to adapt to environmental change to meet customers' needs. Evaluation plays a critical role not only for the final programs, but also the process. The practitioners can examine the quality of broadcasting programs by customers' responses. When the evaluation-improvement process turns into a positive cycle, the programs can be more appealing. In addition, Weng (2001) indicated that the quality of broadcasting programs related to two dimensions: content and structure. The content dimension is associated with internal standards of product quality as well as the production process, while the structure dimension explores the specific workforce and regulation for quality maintenance and management. According to both dimensions, many tasks are involved, such as experts for quality check, communication among practitioners, and standards for quality check. Combing all the scholars' viewpoints, the researcher organized the critical issues into 6 dimensions (Graphic 1):

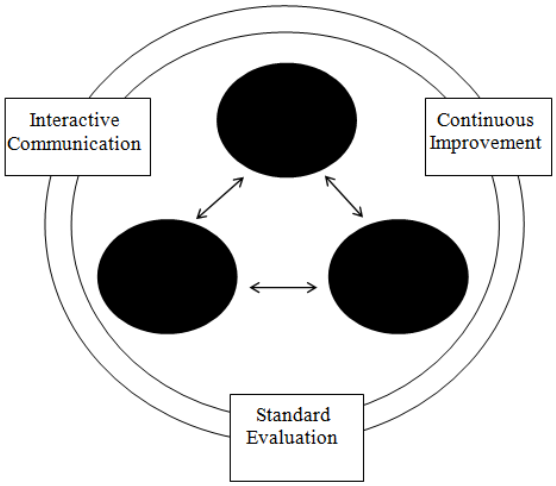


**Figure 1: Critical Issues of Broadcasting Program Quality**

**Specific Quality Indicators in a Systematic Framework**

Even though the critical issues of broadcasting program quality has been analyzed from literature, it needs to take deeper investigation to materialize the factors which practically influence radio program quality. This study adopted modified Delphi method to identify the specific factors and categorize them in a systematic framework. According to the findings of modified Delphi method, the potential factors influencing the quality of radio program scan are sorted into the following four dimensions: operation, coordination, structure, and improvement. The operation dimension represents the formal procedures and documents of quality control in a radio station. The coordination dimension outlines the beliefs of

program quality. In addition, the dimension identifies communication among radio practitioners. The structure dimension is significant for internal and external factors, which are involved in the management of radio program quality. The improvement dimension lays emphasis on evaluation mechanisms and progress strategies for quality control.

The coordination dimension encompasses four sub-dimensions, whereas the other three dimensions include only two sub-dimensions. In the operation dimension, the two sub-dimensions are standard procedures and organizational design. The coordination dimension incorporates administrative promises, practitioner attitudes, professional training, and communication mechanisms. The structure dimension is involved with external and internal factors. The improvement dimension has the following two sub-divisions: performance evaluation and continuous reform. Graphic 2 present the framework of the factors for radio programs. Each sub-dimension incorporates six to nineteen indicators that measure radio program quality. In total, there are 72 indicators within this framework.

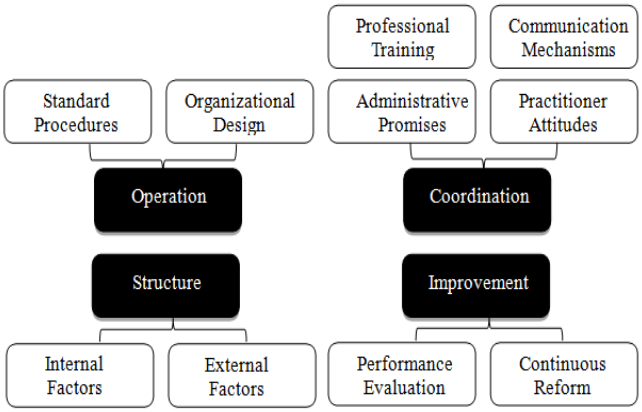


**Figure 2: Dimensions and Sub-Dimensions of the Factors for Radio Program Quality**

## CONCLUSIONS

Seven experts were recruited in May, 2015 to join the group discussion. They examined the questionnaire for phraseological revision and verified the importance of each indicator. In general, the quantitative data of the method indicated that most of the factors from the questionnaire just worked feasibly for this study. The findings can be explained in the following:

- With regard to the dimension terms, the experts consented to the four categories. They did not recommend structural modification.
- In addition, the quantitative data, with mean 5.0, mode 5.0, standard deviation 0, and quartile deviation 0, also supported the fact that the experts had no conflicting opinions on sub-dimensions. As per the qualitative response, there was only one suggestion and that was to modify the definition of the sub-dimension, standard procedure. The suggestion was to include tracking long-term improvement in the sub-dimension, standard procedure, for quality management.
- Under the sub-dimensions, there were 72 indicators in total. Most of them were agreed by the experts. 68 indicators out of those got the mean over 4, which were retained. Four indicators with the mean between 3.33 and 3.67 were advised for modification in wording or operational definition in the first run of the group discussion. After phraseological modified, these indicators were accepted by the experts.

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